

AMENDMENTS TO THE CLAIMS

1 1. (Original) A method for selecting a victim to be used during resolution of a
2 deadlock, the method comprising the steps of:
3 initially establishing a plurality of resources involved in said deadlock as a set of
4 candidates to be said victim;
5 performing a first filtering pass that removes candidates from said set based on
6 CAN-BE-VICTIM flags associated with said candidates;
7 if more than a single candidate remains in said set after said first filtering pass,
8 then performing a second filtering pass that removes candidates from said
9 set based on priorities associated with said candidates; and
10 if more than a single candidate remains in said set after said second filtering pass,
11 then performing a third filtering pass that removes candidates from said set
12 based on runtimes associated with possessory entities associated with said
13 candidates; and
14 when said set has been filtered to include a single candidate, selecting said
15 candidate as said victim.

1 2. (Original) The method of Claim 1 wherein at least a portion of the priority of
2 a given resource is established dynamically.

1 3. (Original) The method of Claim 2 wherein said portion is established based
2 on which other resources are held by a possessory entity associated with the given
3 resource.

1 4. (Original) The method of Claim 1 wherein at least a portion of the priority of
2 a given resource is established statically.

1 5. (Original) The method of Claim 4 wherein said portion is established based
2 on the type of the given resource.

1 6. (Canceled)

1 7. (Currently Amended) ~~The method of Claim 6~~ A method for selecting a victim to
2 be used during resolution of a deadlock, the method comprising the steps of:
3 initially establishing a plurality of candidates involved in said deadlock as
4 candidates to be said victim;
5 filtering said plurality of candidates based on one or more factors until a single
6 candidate remains as a candidate to be said victim, wherein the step of
7 filtering comprises filtering each candidate of the plurality of candidates by
8 taking into account, for each candidate, at least one factor of the one or
9 more factors;
10 selecting said single candidate as the victim to be used during resolution of said
11 deadlock; and
12 wherein the step of filtering further includes removing from said plurality of
13 candidates any candidates that have a CAN-BE-VICTIM flag that indicates
14 the candidate cannot be a victim.

1 8. (Currently Amended) ~~The method of Claim 6~~ A method for selecting a victim to
2 be used during resolution of a deadlock, the method comprising the steps of:
3 initially establishing a plurality of candidates involved in said deadlock as
4 candidates to be said victim;
5 filtering said plurality of candidates based on one or more factors until a single
6 candidate remains as a candidate to be said victim, wherein the step of
7 filtering comprises filtering each candidate of the plurality of candidates by
8 taking into account, for each candidate, at least one factor of the one or
9 more factors;
10 selecting said single candidate as the victim to be used during resolution of said
11 deadlock; and
12 wherein the step of filtering further includes removing from said plurality of
13 candidates the candidates whose resource priority is higher than the
14 resource priority of at least one of the other candidates.

1 9. (Currently Amended) The method of Claim [[6]]7 wherein the step of filtering
2 further includes removing from said plurality of candidates all the candidates that
3 are associated with possessory entities have been running for a duration of time
4 that is relatively longer than the duration of time that possessory entities associated
5 with the other candidates have been running.

1 10. (Canceled)

1 11. (Canceled)

1 12. (Canceled)

1 13. (Currently Amended) The method of Claim [[6]]7 wherein the step for filtering

2 further comprises the computer-implemented steps of:

3 performing a first pass to filter out any candidates that have a CAN-BE-VICTIM

4 flag indicating that one is not candidate for termination;

5 if more than one candidate is left after performing the first pass, then performing a

6 second pass to filter out any candidates whose resource priority is higher

7 than the resource priority of at least one of the other candidates;

8 if more than one candidate is left after performing the second pass, then

9 performing a third pass to filter out all the candidates except the candidate

10 that has been running for the shortest duration of time.

1 14. (Currently Amended) The method of Claim [[6]]7 wherein the step of filtering

2 includes filtering based on priorities established for said candidates.

1 15. (Original) The method of Claim 14 wherein at least a portion of the priority of

2 a given candidate is established dynamically.

1 16. (Original) The method of Claim 15 wherein said portion is established based
2 on which resources other than said candidate are held by a possessory entity
3 associated with the given candidate.

1 17. (Original) The method of Claim 14 wherein at least a portion of the priority of
2 a given candidate is established statically.

1 18. (Original) The method of Claim 17 wherein said portion is established based
2 on the type of the given candidate.

1 19. (Original) A computer-readable medium carrying instructions for selecting a
2 victim to be used during resolution of a deadlock, the computer-readable medium
3 comprising instructions for performing the steps of:
4 initially establishing a plurality of resources involved in said deadlock as a set of
5 candidates to be said victim;
6 performing a first filtering pass that removes candidates from said set based on
7 CAN-BE-VICTIM flags associated with said candidates;
8 if more than a single candidate remains in said set after said first filtering pass,
9 then performing a second filtering pass that removes candidates from said
10 set based on priorities associated with said candidates; and
11 if more than a single candidate remains in said set after said second filtering pass,
12 then performing a third filtering pass that removes candidates from said set

13 based on runtimes associated with possessory entities associated with said
14 candidates; and
15 when said set has been filtered to include a single candidate, selecting said
16 candidate as said victim.

1 20. (Original) The computer-readable medium of Claim 19 wherein at least a
2 portion of the priority of a given resource is established dynamically.

1 21. (Original) The computer-readable medium of Claim 20 wherein said portion
2 is established based on which other resources are held by a possessory entity
3 associated with the given resource.

1 22. (Original) The computer-readable medium of Claim 19 wherein at least a
2 portion of the priority of a given resource is established statically.

1 23. (Original) The computer-readable medium of Claim 22 wherein said portion
2 is established based on the type of the given resource.

1 24. (Canceled)

1 25. (Currently Amended) ~~The computer-readable medium of Claim 24~~ A computer-
2 readable medium carrying instructions for selecting a victim to be used during
3 resolution of a deadlock, the computer-readable medium carrying instructions for
4 performing the steps of:

5 initially establishing a plurality of candidates involved in said deadlock as
6 candidates to be said victim;
7 filtering said plurality of candidates based on one or more factors until a single
8 candidate remains as a candidate to be said victim, wherein the step of
9 filtering comprises filtering each candidate of the plurality of candidates by
10 taking into account, for each candidate, at least one factor of the one or
11 more factors;
12 selecting said single candidate as the victim to be used during resolution of said
13 deadlock; and
14 wherein the step of filtering further includes removing from said plurality of
15 candidates any candidates that have a CAN-BE-VICTIM flag that indicates
16 the candidate cannot be a victim.

1 26. (Currently Amended) ~~The computer-readable medium of Claim 24~~ A computer-
2 readable medium carrying instructions for selecting a victim to be used during
3 resolution of a deadlock, the computer-readable medium carrying instructions for
4 performing the steps of:
5 initially establishing a plurality of candidates involved in said deadlock as
6 candidates to be said victim;
7 filtering said plurality of candidates based on one or more factors until a single
8 candidate remains as a candidate to be said victim, wherein the step of
9 filtering comprises filtering each candidate of the plurality of candidates by
10 taking into account, for each candidate, at least one factor of the one or
11 more factors;

12 selecting said single candidate as the victim to be used during resolution of said
13 deadlock; and
14 wherein the step of filtering further includes removing from said plurality of
15 candidates the candidates whose resource priority is higher than the
16 resource priority of at least one of the other candidates.

1 27. (Currently Amended) The computer-readable medium of Claim [[24]]25 wherein
2 the step of filtering further includes removing from said plurality of candidates all
3 the candidates that are associated with possessory entities have been running for a
4 duration of time that is relatively longer than the duration of time that possessory
5 entities associated with the other candidates have been running.

1 28. (Canceled)

1 29. (Canceled)

1 30. (Canceled)

1 31. (Currently Amended) The computer-readable medium of Claim [[24]]25 wherein
2 the step for filtering further comprises the computer-implemented steps of:
3 performing a first pass to filter out any candidates that have a CAN-BE-VICTIM
4 flag indicating that one is not candidate for termination;

5 if more than one candidate is left after performing the first pass, then performing a
6 second pass to filter out any candidates whose resource priority is higher
7 than the resource priority of at least one of the other candidates;
8 if more than one candidate is left after performing the second pass, then
9 performing a third pass to filter out all the candidates except the candidate
10 that has been running for the shortest duration of time.

1 32. (Currently Amended) The computer-readable medium of Claim [[24]]25 wherein
2 the step of filtering includes filtering based on priorities established for said
3 candidates.

1 33. (Original) The computer-readable medium of Claim 32 wherein at least a
2 portion of the priority of a given candidate is established dynamically.

1 34. (Original) The computer-readable medium of Claim 33 wherein said portion
2 is established based on which resources other than said candidate are held by a
3 possessory entity associated with the given candidate.

1 35. (Original) The computer-readable medium of Claim 32 wherein at least a
2 portion of the priority of a given candidate is established statically.

1 36. (Original) The computer-readable medium of Claim 35 wherein said portion
2 is established based on the type of the given candidate.

1 37. (New) The method of Claim 8 wherein the step of filtering further includes
2 removing from said plurality of candidates all the candidates that are associated
3 with possessory entities have been running for a duration of time that is relatively
4 longer than the duration of time that possessory entities associated with the other
5 candidates have been running

1 38. (New) The method of Claim 8 wherein the step for filtering further comprises the
2 computer-implemented steps of:
3 performing a first pass to filter out any candidates that have a CAN-BE-VICTIM
4 flag indicating that one is not candidate for termination;
5 if more than one candidate is left after performing the first pass, then performing a
6 second pass to filter out any candidates whose resource priority is higher
7 than the resource priority of at least one of the other candidates;
8 if more than one candidate is left after performing the second pass, then
9 performing a third pass to filter out all the candidates except the candidate
10 that has been running for the shortest duration of time.

1 39. (New) The computer-readable medium of Claim 26 wherein the step of filtering
2 further includes removing from said plurality of candidates all the candidates that
3 are associated with possessory entities have been running for a duration of time
4 that is relatively longer than the duration of time that possessory entities associated
5 with the other candidates have been running.

- 1 40. (New) The computer-readable medium of Claim 26 wherein the step for filtering
2 further comprises the computer-implemented steps of:
3 performing a first pass to filter out any candidates that have a CAN-BE-VICTIM
4 flag indicating that one is not candidate for termination;
5 if more than one candidate is left after performing the first pass, then performing a
6 second pass to filter out any candidates whose resource priority is higher
7 than the resource priority of at least one of the other candidates;
8 if more than one candidate is left after performing the second pass, then
9 performing a third pass to filter out all the candidates except the candidate
10 that has been running for the shortest duration of time.